



MyWirelessTV

**Model #: MWTV200T, MWTV200R,
MWTV200KIT**

User Manual

Ver 1.0

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Introduction

Congratulations on purchasing MyWirelessTV. This product will allow you to transmit high-definition content from a set top box, gaming console, or other source with an HDMI port, to an HDTV monitor in another location, without lag or picture quality loss. It allows you to view movies and television programs in two different locations at the same time, without wires, or play a game on a television in one room, while the gaming console resides in another. You can even send content from a computer to MyWirelessTV and, thanks to the USB Extender, use your mouse and keyboard remotely.

This user manual will take you through the procedures needed to connect, configure, and enjoy MyWirelessTV, and also describe a few different possible scenarios concerning set up locations.

Minimum System Requirements

- HD set top box, gaming console, or computer equipped with HDMI output port
- HDTV monitor with HDMI input

Features

- Full 1080p HD output - stream judder-free, full high-definition video in 1080p 60Hz with 3D capability
- Video Pass-through - main HDTV does not lose original HD video content while streaming
- Unicast (1-to-1) - stream from 1 Transmitter to 1 Receiver in full 1080p
- Multi-unicast (1-to-4) - stream from 1 Transmitter to 4 Receivers* with at least one stream at full HD 1080p
- Super Low Latency (SSL) - SSL technology allows streaming full HD video with little latency
- 150-ft. range - works up to 150 feet in range through wall and ceiling without quality reduction
- Control source IR - includes IR Blaster, which allows control of main video source
- Extend IR control - includes IR extender, which allows control of video source without need of placing receiver in line-of-sight (e.g., allows device to be hidden behind HDTV)
- USB backchannel - extend PC control (keyboard and mouse) to location of Receiver
- Compact design - small and compact design allows wall or ceiling mount
- Plug-and-play solution - easy setup with no software installation needed

* Requires additional MyWirelessTV Receivers.

- HDCP compliant[†] - secured video content protection with standard HDCP 2.0 encryption
- HDMI compliant[†] - complies with HDMI™ industry standard to assure device compatibility
- Software support - obtain newer software online to enhance product

Product Contents

- Wireless HD video Transmitter
- Wireless HD video Receiver
- Power adapter
- High-speed HDMI cables
- Remote control
- IR Blaster cable
- IR Receiver cable
- USB mini adapter
- Quick start guide

[†] *Certification pending.*

Getting To Know MyWirelessTV

This section contains a quick overview of MyWirelessTV, including all ports and LEDS on both the MyWirelessTV Transmitter and Receiver.

MyWirelessTV Transmitter

The MyWirelessTV Transmitter features five ports (Power, HDMI Input, IR Transmit, HDMI Passthrough, and mini USB), two buttons (Sync, Reset), and three LEDS (Sync, Power, Wireless).

Transmitter Front Panel



Wireless LED The Wireless LED, located on the front of the Transmitter, is used to display the state of the Transmitter's wireless signal. If unlit, the wireless radio is not on. If lit, the wireless radio is on.

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Sync LED The Sync LED, located on the front of the Transmitter, is used to display the state of synchronization between the Transmitter and Receiver(s). If it is blinking or off, the Transmitter is not synchronized with any Receivers. If it is glowing steadily, synchronization has been established with at least one Receiver.

Sync Button The Sync button, located on the front of the Transmitter, is used set up synchronization with a Receiver or Receivers.

Power LED The Power LED, located on the front of the Transmitter, is used to display the state of the Transmitter's power. If unlit, the unit is off. If lit, the unit is on.

Mini USB Port The Mini USB port, located on the front of the Transmitter, is used to connect a USB stick drive to the Transmitter when a firmware update is available. See "Updating MyWirelessTV's Firmware" for more details. It is also used for the USB backchannel feature.

Reset Button The Reset button, located on the front of the Transmitter, is used to reset the transmitter to factory default settings.

Transmitter Rear Panel



Power Port The Power port, located on the back of the Transmitter, is used to connect the Power cord to the Transmitter.

HDMI Input Port The HDMI Input port, located on the back of the Transmitter, is used, via an HDMI cable, to connect the Transmitter to an HDMI source (set top box, Blu-ray player, gaming console, etc.).

HDMI Passthrough Port The HDMI Passthrough (Out to TV) port, located on the back of the Transmitter, is used, via an HDMI cable, to connect the Transmitter to a local HDTV to allow continued video viewing on the monitor located nearest to the Transmitter.

IR Transmit Port The IR Transmit port, located on the back of the Transmitter, is used to connect the IR Blaster cable to the Transmitter, enabling the use of the source device remote control in tandem with MyWirelessTV.

MyWirelessTV Receiver

The MyWirelessTV Receiver features three ports (Power, HDMI Out, USB), two buttons (Sync, Reset), and three LEDs (Wireless, Sync, Power).

Receiver Front Panel



Wireless LED The Wireless LED, located on the front of the Receiver, is used to display the state of the Receiver's wireless signal. If unlit, the wireless radio is not on. If lit, the wireless radio is on.

Sync LED The Sync LED, located on the front of the Receiver, is used to display the state of synchronization between the Receivers and Transmitter. If it is blinking or off, the Receiver is not synchronized with any receivers. If it is glowing steadily, synchronization has been established with at least one Transmitter.

Sync Button The Sync button, located on the front of the Receiver, is used set up synchronization with a Transmitter.

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Power LED The Power LED, located on the front of the Receiver, is used to display the state of the Receiver's power. If unlit, the unit is off. If lit, the unit is on.

USB Port The USB port, located on the front of the Receiver, is used to connect a USB stick drive to the Receiver when a firmware update is available. See "Updating MyWirelessTV's Firmware" for more details. It is also used for the USB Backchannel feature.

Receiver Rear Panel



Reset Button The Reset button, located on the back of the Receiver, is used to reset the Receiver to factory default settings.

Power Port The Power port, located on the back of the Receiver, is used to connect the Power cord to the Receiver.

HDMI Out to TV Port This port, located on the back of the Receiver, is used, via an HDMI cable, to connect the Receiver to an HDMI-ready display, such as a high-definition TV.

IR Port This port, located on the back of the Receiver, is used to connect the IR Receiver cable, used to extend the range of the source device's remote control (in conjunction with the IR Blaster cable connected to the Transmitter).

Connecting MyWirelessTV

Connecting MyWirelessTV consists of two parts: connecting the Transmitter to a source of high-definition video, and connecting the receiver to a high-definition television monitor. This chapter will take you through both procedures, as well as setting up the IR Blaster and IR Receiver to allow you to use the remote control of the source device in the location you are watching (or playing) your content.

Connecting the MyWirelessTV Transmitter

1. The Transmitter must be installed near the video's source device (set top box, Blu-ray player, gaming console, etc.)
2. Get one of the power supplies from the MyWirelessTV kit and plug the small end of the Power adapter into the 5VDC (Power) port of the back of the Transmitter
3. Plug the other end into an electrical wall socket. The PowerLED will glow solid green.
4. Unplug the HDMI cable that connects the source device to the television monitor from the source device. It should now only be connected to the monitor.
5. Plug the free end of the HDMI cable you unplugged in step 4 into the HDMI Out to TV port on the back of the Transmitter. This cable should now connect the television monitor to the Transmitter.
6. Get an HDMI cable from the MyWirelessTV kit and plug one end into the HDMI Input port on the back of the Transmitter.

7. Plug the other end of this HDMI cable to an HDMI port on the source device. This cable should now connect the Transmitter to the source device.
8. Turn on the HDTV and make sure you can see video from your source device.

Connecting the MyWirelessTV Receiver

The Receiver must be installed near the HDTV monitor where you intend to watch the content being streamed from the source device.

1. Get the second power supply from the MyWirelessTV kit and plug the smaller end into the 5VDC (Power) port on the back of the Receiver.
2. Plug the other end into an electrical wall socket. The Power LED will glow solid green.
3. Get the second HDMI cable from the MyWirelessTV kit and plug one end into an HDMI port on the HDTV monitor.
4. Plug the other end of this HDMI cable into the HDMI Out to TV port on the back of the Receiver. This cable should now connect the Receiver to the HDTV monitor.
5. Turn on the HDTV monitor. You should be able to see content being streamed from the source device.

Setting Up IR Control

MyWirelessTV comes with an IR Blaster and IR Receiver, which work together to allow you to control the source device from the location you are watching, whether it's in the next room or on the other side of the house. For example, if your Blu-ray player is in the living room, and you've set up MyWirelessTV to watch on an HDTV in the bedroom, the IR Blaster/Receiver allows you to control the Blu-ray player from your bedroom.

Note: If you are using MyWirelessTV in the same location (i.e., the source device and the HDTV monitor are in the same room), the IR Blaster/Receiver is not needed.

Connecting the IR Extender Cable

The IR Extender cable receives signals from the source device remote control and sends them back to the source device.

1. Get the IR Extender cable (it has a green connector) from the MyWirelessTV kit.
2. Plug the IR Extender's green connector into the green IR port on the back of the Receiver.
3. Remove the protective covering of the double-stick tape and attach the flat end of the IR Receiver cable to the front corner of the HDTV monitor's bezel or frame

Connecting the IR Blaster Cable

The IR Blaster cable receives the source device remote control signal from the Receiver and delivers it to the source device.

1. Get the IR Blaster cable (it has a black connector) from the MyWirelessTV kit.
2. Plug the black connector of the IR Blaster cable into the IR Transmit port on the back of the Transmitter.

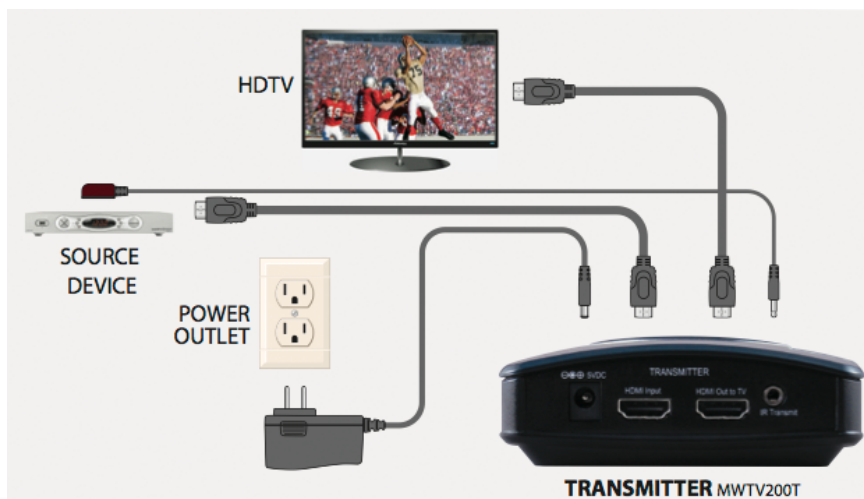
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3. Place the flat end of the IR Blaster cable in front of the remote sensor of the source device.

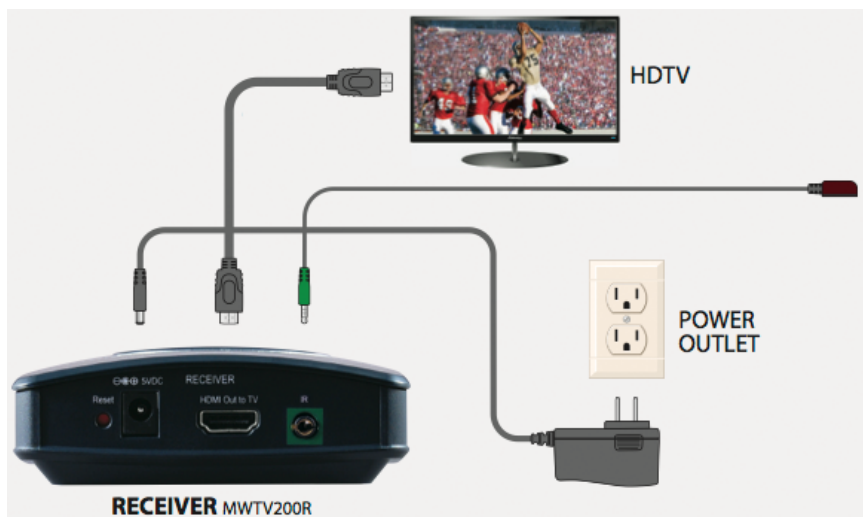
You should now be able to use the remote control of the source device from the location of the HDTV monitor to which you are streaming content.

Typical MyWirelessTV Connection Configuration

Transmitter



Receiver



Connecting to a Computer as a Source Device

If you want to use a computer with an HDMI out port with MyWirelessTV, connect the computer as you would any other HDMI device (see “Connecting MyWirelessTV Transmitter” and “Connecting MyWirelessTV Receiver,” above). You can then use MyWirelessTV’s USB Backchannel feature (see next page) to operate your keyboard and mouse from the MyWirelessTV’s Receiver.

Using USB Backchannel

1. After connecting the computer to the Transmitter, and an HD monitor to the Receiver, get the mini USB connector from the kit and plug it into the mini USB port on the Transmitter.
2. Get a USB cable (not included in kit) and connect it to the mini USB connector plugged into the Transmitter, and a USB port on the computer.
3. Plug your keyboard/mouse into the USB port on the Receiver. You should now be able to control your computer remotely.

Using the MyWirelessTV Graphical User Interface

This chapter describes using the MyWirelessTV graphical user interface, which allows you to configure various aspects of MyWirelessTV, including changing the source device, adjusting latency, and resetting the devices.

Remote Control

The remote control that comes with MyWirelessTV is used to access the device's graphical user interface (GUI). The GUI appears on the HDTV monitor connected to the Receiver. There is no access to a GUI on the monitor connected to the Transmitter.



Buttons

To navigate the GUI screens, you must use several of the buttons on the remote control. Following is a list of the buttons needed to navigate the GUI.

Select Source Shortcut



Pressing this button displays the possible source devices available, and allows you select one (by pressing the Up and Down buttons on the remote control to navigate, and selecting one by pressing the OK button).

Menu



Pressing this button generates the Main Menu screen. If you are already in the Main Menu screen, pressing the Menu button again returns you to the video screen.

Direction (Up, Down, Left, Right)



Pressing one of these buttons allows you to navigate in the direction selected within the GUI.

OK



Pressing this button confirms the selection made within the GUI.

Back



Pressing this button returns you to the previous screen in the GUI (cancels the last navigation command performed).

Information



Pressing this button displays the System Information screen.

Exit



Pressing this button exits the GUI and returns you to the video stream on the HDTV monitor.

Graphical User Interface

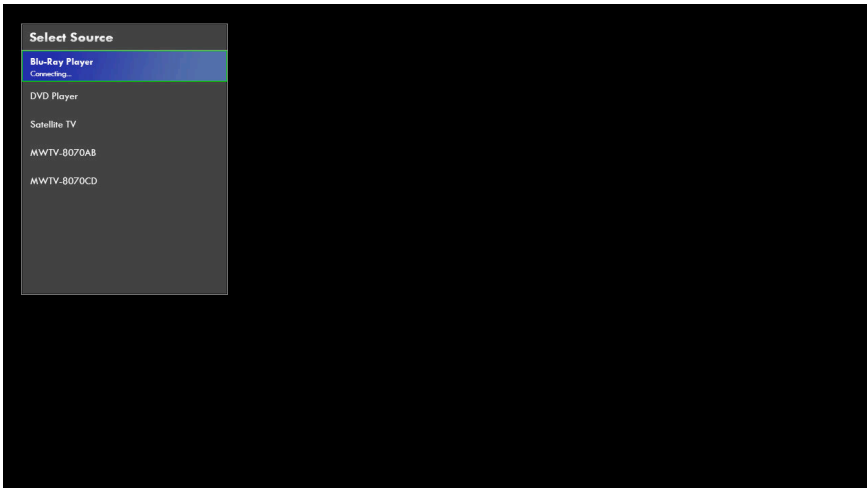
To access MyWirelessTV's graphical user interface, press the Menu button the remote control. The Main Menu appears:



MyWirelessTV's Graphical User Interface is organized in four categories, which are represented by the four icons in the Main Menu: Select Source, Configure, General Settings, and Advanced Settings.

Select Source

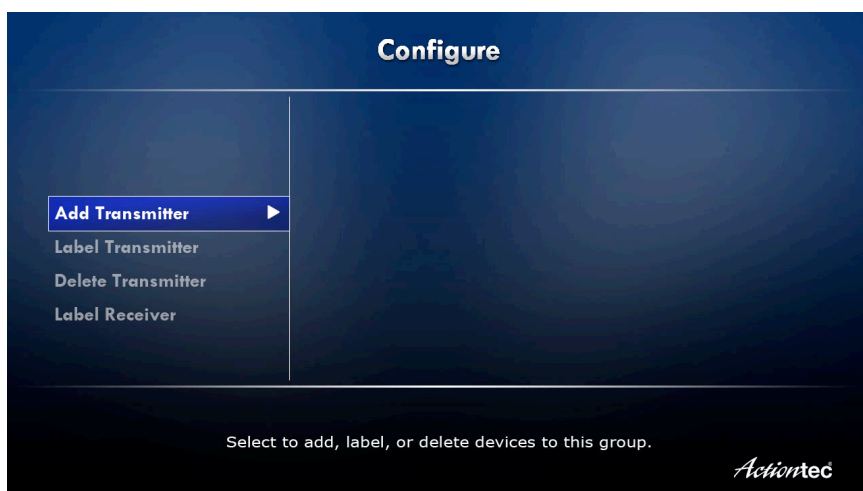
Selecting Select Source from the Main Menu screen (by navigating to the appropriate icon and the pressing OK on the remote control) generates the Select Source screen:



This screen overlays the video stream being transmitted to your HDTV monitor and allows you to select another source of video streaming, assuming you have configured multiple MyWirelessTV Transmitters connected to a range of other source devices (additional Blu-ray Players, DVRs, gaming consoles, etc.). Navigate over the list using the Up and Down buttons on the remote control. To select a different source, highlight it, then press the OK button on the remote control. The new video stream will appear on the HDTV monitor.

Configure

Selecting Configure from the Main Menu screen (by navigating to the appropriate icon and the pressing OK on the remote control) generates the Configure screen:



There are four options in this screen: Add Transmitter, Label Transmitter, Delete Transmitter, and Label Receiver.

Add Transmitter

Selecting Add Transmitter in the Configure screen causes the Receiver to scan for additional Transmitters within its range, then add the device to its Source list. Once the Receiver completes its scan, a list of possible Transmitters appears in the right-hand pane of the screen. Select one, then press OK on the Remote to select that particular Transmitter.

Label Transmitter

Selecting Label Transmitter generates a list of names in the right-hand pane with which you can label the currently streaming source device, such as DVR, Blu-ray player, etc. At the bottom of the list is a Custom option. Selecting this option generates a graphical keyboard with which you can create a custom label for this source device by entering the name of your choice.

Delete Transmitter

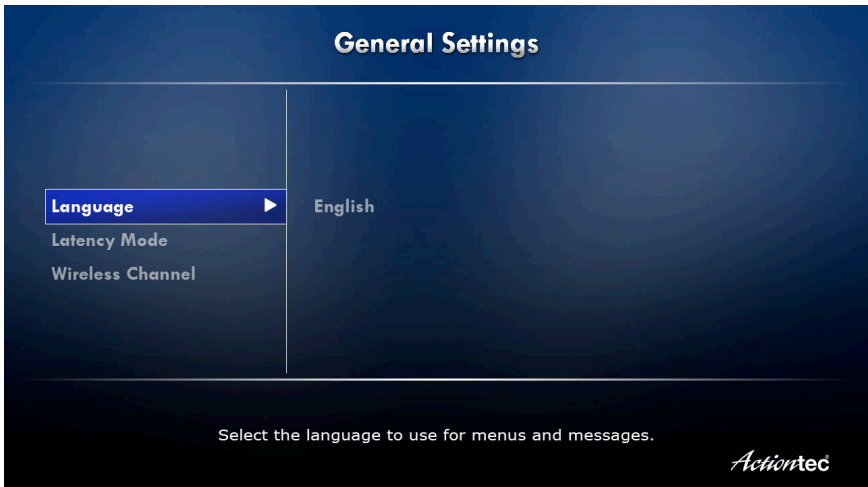
Selecting Delete Transmitter in the Configure screen allows you to delete added Transmitters. Once the Receiver completes its scan, a list of Transmitters appears in the right-hand pane of the screen. Select one, then press OK on the Remote to delete a particular Transmitter.

Label Receiver

Selecting Label Receiver generates a list of names in the righthand pane with which you can label the location of the current streaming target device (the HDTV monitor connected to the Receiver), such as Bedroom 1, Kitchen, Family Room, etc. At the bottom of the list is a Custom option. Selecting this option generates a graphical keyboard with which you can create a custom label for this target device by entering the name of your choice.

General Settings

Selecting General Settings from the Main Menu screen (by navigating to the appropriate icon and the pressing OK on the remote control) generates the General Settings screen:



There are three options in this screen: Language, Latency Mode, and Wireless Channel.

Language

Selecting Language in the General Settings screen generates a list of languages for the MyWirelessTV GUI in the right-hand pane. Currently, only English is available.

Latency Mode

Selecting Latency Mode in the General Settings screen causes the Receiver to list the latency mode options (Theater Mode and Game Mode) in the right-hand pane. Selecting Theater Mode causes MyWirelessTV to prioritize video quality over video speed. Selecting Game Mode causes MyWirelessTV to prioritize video speed over video quality. If you are using a computer in conjunction with MyWirelessTV, we suggest using Game Mode to more effectively control the keyboard and mouse.

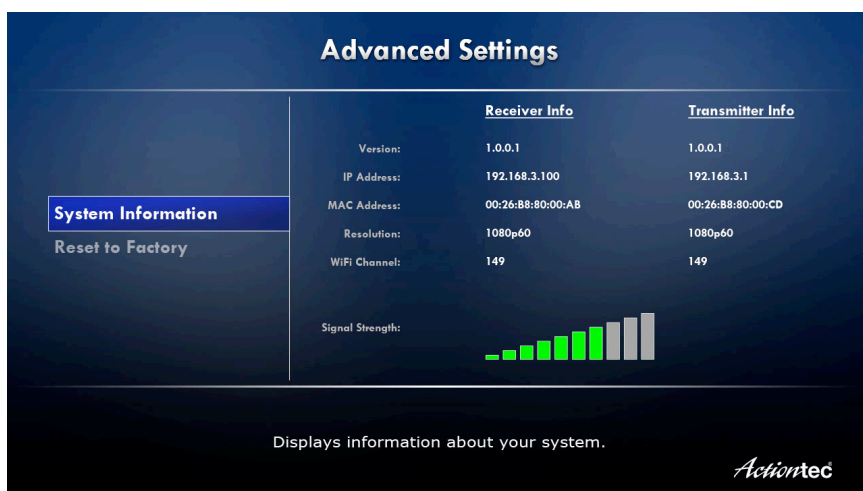
Wireless Channel

MyWirelessTV uses the 802.11n frequency for wireless networking. If you notice lagging or pixelation with MyWirelessTV's streaming video, you may be using an 802.11n channel already in use. Selecting Wireless Channel generates the wireless channel options available on MyWirelessTV (Auto, Channel 44, Channel 149, Channel 157). Select a channel to have MyWirelessTV stream using a different channel, or select Auto (recommended) to have MyWirelessTV select an unused wireless channel automatically.

Note: Selecting a different channel will automatically reset the system. Also, you must power-cycle all Receivers in the network to use a different channel.

Advanced Settings

Selecting Advanced Settings from the Main Menu screen (by navigating to the appropriate icon and then pressing OK on the remote control) generates the Advanced Settings screen:



There are two options in this screen: System Information and Reset to Factory.

System Information

Selecting System Information in the Advanced Settings screen generates the System Information graphic in the right-hand pane. This graphic displays, for both the Receiver and Transmitter, the firmware version of each device, the IP addresses being used, and their respective MAC addresses, resolutions, and WiFi channels. Finally, a bar graph displaying the signal strength between the Transmitter and Receiver is displayed at the bottom of the screen.

Reset to Factory

Selecting Reset to Factory in the Advanced Settings screen generates a window on the screen, asking the following: Are you sure you want to reset to factory defaults? If you reset MyWirelessTV to factory default settings, all saved pairing information will be lost (except the original pairing information). Select Reset to have MyWirelessTV go through the reset procedure, which will take about 1 minute. After reboot, MyWirelessTV devices will have been reset to factory default settings. Select Cancel to exit this window without resetting MyWirelessTV.

Updating MyWirelessTV Firmware

Actiontec recommends that all MyWirelessTV users update their device with the latest firmware update to take advantage of recently developed performance enhancements, new features, and bug fixes. To view the current firmware version number, press the Menu button on the MyWirelessTV remote control, then select Advanced Settings (or press the *(i)* button on the remote control. Compare this version number with the latest version available at <http://www.actiontec.com/mwvtv>. If the version on your MyWirelessTV device is older, perform the following procedure.

To update the firmware on your MyWirelessTV devices:

1. Using a web browser, go to <http://www.actiontec.com/mwvtv>.
2. Follow the online instructions to download the latest MyWirelessTV firmware to the USB thumb drive included in the MyWirelessTV kit.
3. Once the firmware is downloaded to the thumb drive:
 - a. On a Receiver, plug the USB thumb drive into the USB port on the front of the Receiver;
 - b. On a Transmitter, plug the USB thumb drive into the larger end of the mini USB adapter, then plug the smaller end of the mini USB adapter into the mini USB port on the front of the Transmitter.

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4. Watch the Power and Sync LEDs of the device flash for 2-3 minutes. Do not power down the device or remove the USB thumb drive while the LEDs are flashing.
5. After the LEDs turn off briefly, the Power LED will flash, then glow solid green. When this occurs, remove the thumb drive from the MyWirelessTV device.
6. Repeat steps 3-5 for all MyWirelessTV devices that need an update.

Once the firmware update has been applied to all MyWirelessTV devices, perform a power cycle (turn off, then on) on all devices. The MyWirelessTV devices will pair automatically, streaming audio and video. Perform another power cycle on all devices. The firmware update has been successfully applied.

Troubleshooting

This chapter will describe some problems you may encounter using MyWirelessTV, and the possible solutions to those problems. Also included are frequently asked questions, and the answers the questions.

Frequently Asked Questions

Why can't I see anything on the TV next to the Transmitter?

Check the cable connection from the external source (i.e., cable/satellite set top box, Blu-ray player) to the Transmitter and from the Transmitter out to the HDTV.

Why can't I see anything on the TV, even though all the cables are connected properly?

Make sure the external source device is powered on and the correct source input is selected on your HDTV.

Why can't I see anything on the TV next to the Receiver?

Check the cable connection from the MyWirelessTV Receiver out to the HDTV. Also, make sure the correct source input is selected.

Why can't I control my external source device from my second HDTV?

Make sure the IR Blaster sensor is pointed directly to the external source device's IR sensor window. Also, check that the Receiver or the IR Extender cable is in line-of-sight of the remote control.

Why can't I change my channel or volume with the MyWirelessTV remote control?

The remote control is intended only for switching inputs, pairing configurations, and software updates. Use the HDTV remote control for changing channels or adjusting volume.

Why don't I see any video when I connect my HDMI PC or laptop computer to MyWirelessTV?

Make sure the HDMI output display is selected from your PC or laptop. If needed, refer to your PC or laptop's user manual for more information.

Why is the video quality so poor?

To improve video quality, try adjusting the orientation of the Transmitter and/or Receiver. Use the Wireless Power Indicator (in the MyWirelessTV's GUI, go to Advanced Settings, then System Information) to see what orientation works best for your situation.

Why aren't my remote keyboard and mouse working when I connect MyWirelessTV to my computer?

Check your cable connections. Make sure you have a USB 2.0 A to Mini-B cable connected between your Transmitter and your computer's USB port.

Why am I not seeing video from my Motorola cable set top box after seeing an HDCP warning message on my HDTV?

As of October 1, 2011, some Motorola cable set top boxes are known to have video authentication issues with certain video devices. Check with your cable service provider to see if a software update is available for your cable set top box.

I have my MyWirelessTV Receiver and Transmitter in the same room. Why does my source device accept the command from the remote control twice?

To prevent the source device from getting the IR command twice, connect your IR Extender cable to the Receiver and hide the IR sensor from direct line-of-sight.

What is the remote control used for?

The MyWirelessTV remote control is used to configure different setups, such as connecting two Transmitters to a single Receiver. Also, you can access the MyWirelessTV's graphical user interface to change system settings. See the "Remote Control" section of the "Using the MyWirelessTV Graphical User Interface" chapter for more information.

Specifications

This chapter lists the specifications of the MyWirelessTV devices.

General

Video Specifications

Multisource: Multiple Transmitters[‡] to 1 Receiver

Multicast: 1 Transmitter to multiple Receivers[§] (up to 4)

Range: Up to 150 ft.

Resolution: 480i, 480p, 720p, 1080i, and 1080p

End-to-end latency: < 20ms

Average Bitrate: 35Mbps

Input: 1 HDMI (Transmitter)

Output: 1 HDMI Wireless (Receiver), 1 HDMI Pass-through (Transmitter)

Technical Specifications

Wireless: 802.11n

Security: Standard WiFi security

Bandwidth: 5Ghz

Pairing: Pre-paired and Sync push button

[‡] Additional Transmitters sold separately.

[§] Additional Receivers sold separately.

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USB: 1 USB Type A (Receiver); 1 USB Mini (Transmitter)

Power: 5V 3A

Weight: 0.30 lb. (per device)

Dimension: 4.125 in. W x 1.25 in. H x 4.75 in. D

Regulatory Compliance: FCC Class B & C, UL, IC

Operating temperature: 0° to 40° C

Color: Glossy black

LED Indicators

Transmitter

Sync, Power, Wireless

Receiver

Sync, Power, Wireless

GPL License

To see the GPL License, go to the following link:

<http://opensource.actiontec.com/>